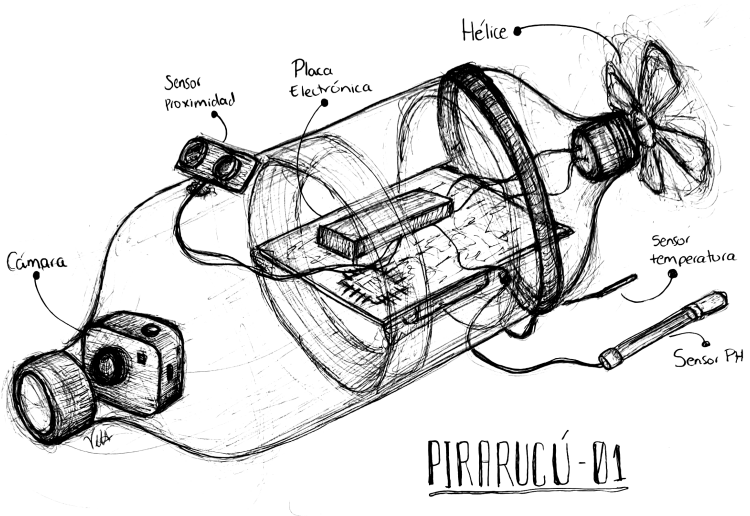
Pirarucú 01: speculative probe object made of recyclable materials



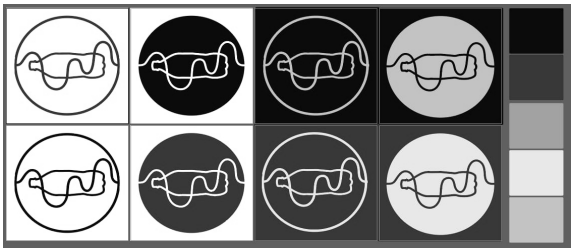
Mixed media (DIY recycled objects, video, Arduino and Processing programming)
2025

This project arose from conversations with the community of Leticia (Amazonas department, Colombia). Someone mentioned equipping a PET bottle with a video camera and throwing it into the river to document plastic pollution. This unlikely proposal sparked the question: What would happen if we created a pollution measurement probe using recyclable materials such as a plastic bottle?

The inquiry produced a video installation consisting of the speculative PET bottle probe and a video documenting the process and simulating the probe's journey down the river. Although the prototype is not functional, it required exploring real technical solutions. Thus, the creation articulates citizen science and local technologies within a conceptual framework of open science and epistemic diversity.

This piece is part of an interdisciplinary project at the Universidad Nacional de Colombia called «Pulsos del agua: un acercamiento integrado a la Leticia anfibia» (Water Pulses: An Integrated Approach to Amphibious Leticia), which focuses on the issue of water in the Colombian municipality of Leticia, located on the banks of the Amazon River. Since the water in Leticia is not drinkable, the population has to resort to bottled water, causing a problem of plastic pollution. At a community meeting, a person who works at a plastic recycling plant raised this issue and spoke of a possible plastic island, like the one in the Pacific, located at the mouth of the Amazon River in Brazil. She then launched the idea of equipping a PET bottle with a video camera and letting it float down the river. Despite the improbability of the idea, the proposal triggered a speculative design process based on the question: What would happen if we created a pollution measurement probe using recyclable elements such as a plastic bottle?

The object was constructed using a prototyping methodology, with some prototypes being submerged in water and ending up as the current object, which is an object for exhibition. Although the object is not functional, its construction brought up several questions that a scientific project would actually have to resolve: How would the probe be powered? Would it store its data or transmit it? What would happen if it encountered an obstacle along the way? Would it be lost in the river or could it be recovered? How could the internal electronic circuits be waterproofed? This process led us to a very interesting poetic revelation: this project seeks to reverse the most common direction of art and science projects, where the former is inspired by the latter, and proposes play, speculation, and artistic creation as a legitimate methodology for positing scientific questions and proposing hypotheses to real problems.



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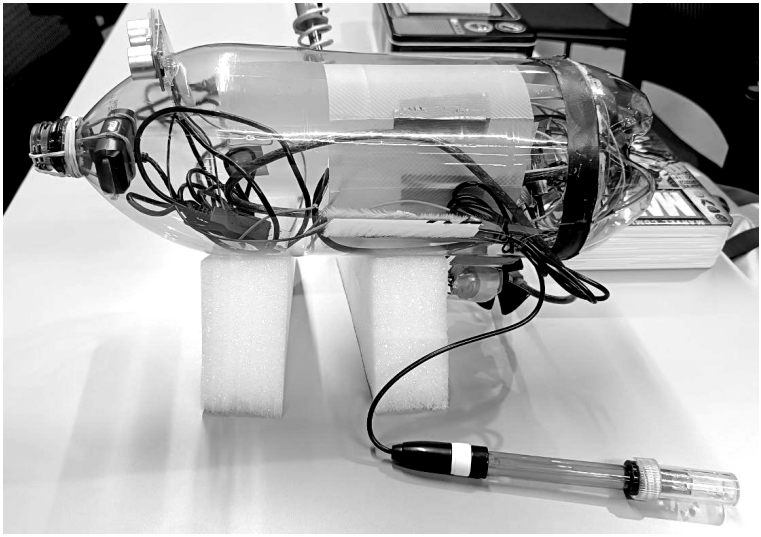
Similarly, we want to apply a geographical metaphor: Leticia is a municipality of three borders because it is located between Brazil, Colombia, and Peru. This project proposes a similar idea in the techno-scientific field, where digital technologies, ancestral technologies, and recycling technologies come together to foster the development of scientific technologies and instruments that promote epistemic justice and technological sovereignty from a perspective based on “do it yourself” , ***chacharreo*** (colombian word akin to “tinkering”) or the Brazilian concept of ***gambiarra***.



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Thus, we can envision a future where we can better understand the territory using our own tools and on our own terms in an interdisciplinary and culturally diverse ***dialogue of knowledges***.

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Pulsos del Agua

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http://espam.hotglue.me/pirarucu01

This fanzine was created using the free software programs Gimp, Inkscape, and Scribus, and the recently released UNAL Ancizar font was used.

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